DETAILED ACTION

1. Claims 1, 6-8, 10-20 are pending in the application.

2. Claims 2-5 & 9 have been canceled.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Scott Talbot on 02/24/2009.

The claims have been amended as follows:

- **Replace** Claim 1 **with**:

"A method of placing pilot symbols in a data stream for telecommunications systems, the data stream including a data packet, comprising:

placing the pilot symbols with irregular spacing within a first level group;

repeating the irregular spacing in a plurality of such first level groups;

placing the first level groups with irregular spacing within a second level group; and

wherein the pilot symbols are distributed within the data stream in time in a manner fractal in nature using a range of different intervals between the pilot symbols."

- **Cancel** Claims 3-5.
- **Replace** Claim 6 **with**:

"The method of claim 1, wherein the distributing further includes:

repeating the irregular spacing between the first level groups in a plurality of second level groups across the data packet; and

placing the second level groups with irregular spacing within a third level group."

- **Replace** Claim 7 **with**:

"The method of claim 6, wherein each first level group has length A, each second level group has length B, and the third level group has length C, the pilot symbol distribution selected such that the ratio A:B is approximately equal to the ratio B:C."

- **Replace** Claim 8 **with**:

"The method of claim 1, wherein the pilot symbols extend across the entirety of the data packet."

- **Cancel** Claim 9.
- **Replace** Claim 10 **with**:

"A signal processing device for use in a communications system, the signal processing device comprising:

a data source configured to generate a data stream for telecommunications systems; and

a pilot symbol placer configured to place pilot symbols in the data stream in accordance with the method of claim 1."

Allowable Subject Matter

4. Claims 1, 6-8 & 10-20 are allowed over the Prior Art of record.

5. Claims 1, 6-8 & 10-20 and re-numbered as claims 1-15 respectively are allowable over the prior art of record because the cited references do not contain the specified limitation of a method of placing pilot symbols in a data stream for telecommunications systems, the data stream including a data packet, comprising: placing the pilot symbols with irregular spacing within a first level group; repeating the irregular spacing in a plurality of such first level groups; placing the first level groups with irregular spacing within a second level group; and wherein the pilot symbols are distributed within the data stream in time in a manner fractal in nature using a range of different intervals between the pilot symbols.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUDHANSHU C. PATHAK whose telephone number is (571)272-5509. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on 571-272-3042.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sudhanshu C Pathak/
Primary Examiner, Art Unit 2611